

# AIR POLLUTION CONTROL DISTRICT OF JEFFERSON COUNTY, KENTUCKY TITLE V OPERATING PERMIT

Permit No.: 143-97-TV Plant ID: 0187

Effective Date: ## XXXXXX 2000 Expiration Date: ## XXXXXX 2000

UTM Northing: 4230.0 UTM Easting: 601.7

SIC: 3399 NAICS: 331314 AFS: 00187

Permission is hereby given by the Air Pollution Control District of Jefferson County to operate equipment located at:

Eckart Aluminum L.P. 4101 Campground Road Louisville, Kentucky 40201

in accordance with the permit application on file with the District and under the conditions in the permit. This permit and the authorization to operate the emission units listed shall expire on midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Applicant for Permit: Eckart Aluminum L.P.

Responsible Official: Richard M. Thomas

Title of Responsible Official: President - Eckart Aluminum L.P.

Date Application Received: 21 April 1995, revised 6 July 2000

Date Application Administratively Complete: 13 June 1995, 7 July 2000

Date Public Notice Given: ## xxxxxxxx ####

Reviewing Engineer (61)

Air Pollution Control Officer

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# Abbreviations and Acronyms

AFS - AIRS Facility Subsystem

AIRS - Aerometric Information Retrieval System

APCD - Air Pollution Control District ASL - Adjusted Significant Level

atm - Atmosphere

BACT - Best Available Control Technology

Btu - British Thermal Unit °C - Degrees Centigrade

CEMS - Continuous Emission Monitoring System

CAAA - Clean Air Act Amendments (15 November 1990)

cf - Cubic foot

DOE - District Only Enforceable°F - Degrees Fahrenheit

gal - Gallon

HAP - Hazardous Air Pollutant

Hg - Mercury hr - hour lbs - Pounds 1 - Liter

MACT - Maximum Achievable Control Technology

m - Meter mg - Milligram mm - Millimeter MM - Million

MOCS - Management of Change System

NAICS - North American Industry Classification System

NSR - New Source Review NO<sub>x</sub> - Nitrogen oxides

NSPS - New Source Performance Standards

PM - Particulate Matter

PM<sub>10</sub> - Particulate matter less than 10 microns

ppm - Parts per million

PSD - Prevention of Significant Deterioration

PMP - Preventive Maintenance Plan psia - Pounds per square inch absolute

RACT - Reasonably Available Control Technology

SIC - Standard Industrial Classification

SIP - State Implementation Plan

SO<sub>2</sub> - Sulfur dioxide

TAL - Threshold Ambient Limit

TAP - Toxic Air Pollutanttpy - Tons per year

VOC - Volatile Organic Compound UTM - Universal Transverse Mercator

#### **Preamble**

Title V of the Clean Air Act Amendments of 1990 required EPA to create an operating permit program for implementation by state or local air permitting authorities. The purposes of this program are (1) to require an affected company to assume full responsibility for demonstrating compliance with applicable regulations; (2) to capture all of the regulatory information pertaining to an affected company in a single document; and (3) to make permits more consistent with each other.

A company is subject to the Title V program if it meets any of several criteria related to the nature or amount of its emissions. The Title V operating permit specifies what the affected company is, how it may operate, what its applicable regulations are, how it will demonstrate compliance, and what is required if compliance is not achieved. In Jefferson County, Kentucky, the Air Pollution Control District (APCDJC) is responsible for issuing Title V permits to affected companies and enforcing local regulations and delegated federal and state regulations. EPA may enforce federal regulations but not "District Only Enforceable Regulations".

Title V offers the public an opportunity to review and comment on a company's draft permit. It is intended to help the public understand the company's compliance responsibility under the Clean Air Act. Additionally, the Title V process provides a mechanism to incorporate new applicable requirements. Such requirements are available to the public for review and comment before they are adopted.

Title V Permit general conditions define requirements which are generally applicable to all Title V companies under the jurisdiction of APCDJC. This avoids repeating these requirements in every section of the company's Title V permit. Company-specific conditions augment the general conditions as necessary; these appear in the sections of the permit addressing individual emission units or emission points.

The general conditions include references to regulatory requirements that may not currently apply to the company, but which provide guidance for potential changes at the company or in the regulations during the life of the permit. Such requirements may become applicable if the company makes certain modifications or a new applicable requirement is adopted.

When the applicability of a section or subpart of a regulation is unclear, a clarifying citation will be made in the company's Title V permit at the emission unit/point level. Comments may also be added at the emission unit/point level to give further clarification or explanation.

The source's Title V permit may include a list of "insignificant activities," which are activities or processes falling into the general categories defined in Regulation 2.02, Section 2, and not associated with a specific operation or process for which there is a specific regulation. Activities so identified may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply and must be included in the Title V operating permit. No periodic monitoring shall be required for facilities designated as insignificant activities.

#### **General Conditions**

- 1. <u>Compliance</u> The owner or operator shall comply with all applicable requirements and with all terms and conditions of this permit. Any noncompliance shall constitute a violation of the Act, State and District regulations and shall cause the source to be subject to enforcement actions including, but not limited to, the termination, revocation and reissuance, or revision of this permit, or denial of a permit application to renew this permit. Notwithstanding any other provision in the Jefferson County portion of the Kentucky SIP approved by EPA, any credible evidence may be used for the purpose of establishing whether the owner or operator is in compliance with, has violated, or is in violation of any such plan. (Regulation 2.16, sections 4.1.3, 4.1.13.1 and 4.1.13.7)
- 2. <u>Compliance Certification</u> The owner or operator shall certify, annually or more frequently if required in applicable regulations, compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall meet the requirements of Regulation 2.16, sections 3.5.11 and 4.3.5. The owner or operator shall submit the annual compliance certification directly to the following address as well as to the District, as set forth in Regulation 2.16, section 4.3.5.4:

US EPA - Region IV Air Enforcement Branch Atlanta Federal Center 61 Forsyth Street Atlanta, GA 30303-8960

- 3. <u>Compliance Schedule</u> A compliance schedule must meet the requirements of Regulation 2.16, section 3.5.9.5. The owner or operator shall submit a schedule of compliance for each emission unit that is not in compliance with all applicable requirements. A schedule of compliance shall be supplemental to, and shall not condone noncompliance with, the applicable requirements on which it is based. For each schedule of compliance, the owner or operator shall submit certified progress reports at least semi-annually, or at a more frequent period if specified in an applicable requirement or by the District in accordance with Regulation 2.16 section 4.3.4. The progress reports shall contain:
  - a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when activities, milestones, or compliance were achieved.
  - b. An explanation of why dates in the schedule of compliance were not or will not be met, and preventive or corrective measures adopted.
- 4. **<u>Duty to Supplement or Correct Application</u>** If the owner or operator fails to submit relevant facts or has submitted incorrect information in the permit application, it shall, upon discovery of the occurrence, promptly submit the supplementary facts or corrected information in accordance with Regulation 2.16, section 3.4.

## 5. <u>Emergency Provision</u>

- a. An emergency shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emission limitations. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - i. An emergency occurred and that the owner or operator can identify the cause of the emergency.
  - ii. The permitted facility was at the time being properly operated.
  - iii. During the period of the emergency the owner or operator expeditiously took all reasonable steps, consistent with safe operating practices, to minimize levels of emissions that exceeded the emission standards or other requirements in this permit.
  - iv. The owner or operator submitted notice meeting the requirements of Regulation 1.07 of the time when emissions limitations were exceeded because of the emergency. This notice must fulfill the requirement of this condition, and must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- b. In an enforcement proceeding, the owner or operator seeking to establish the occurrence of an emergency has the burden of proof.
- c. This condition is in addition to any emergency or upset provision contained in an applicable requirement. (Regulation 2.16, sections 4.7.1 through 4.7.4)
- 6. <u>Emission Fees Payment Requirements</u> The owner or operator shall pay annual emission fees in accordance with Regulation 2.08. Failure to pay the emissions fees when due shall constitute a violation of District Regulations. Such failure is subject to penalties and an increase in the fee of an additional 5% per month up to a maximum of 25% of the original amount due. In addition, failure to pay emissions fees within 60 days of the due date shall automatically suspend this permit to operate until the fee is paid or a schedule for payment acceptable to the District has been established. (Regulation 2.08, section 1.3)
- 7. **Emission Offset Requirements** The owner or operator shall comply with the requirements of Regulation 2.04.
- 8. <u>Enforceability Requirements</u> Except for the conditions that are specifically designated as "District Only Enforceable Conditions", all terms and conditions of this permit, including any provisions designed to limit a source's potential to emit, are enforceable by EPA and citizens as specified under the Act. (Regulation 2.16, sections 4.2.1 and 4.2.2)

#### 9. **Enforcement Action Defense**

- a. It shall not be a defense for the owner or operator in an enforcement action that it would have been necessary for the owner or operator to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- b. The owner or operator's failure to halt or reduce activity may be a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operation. (Regulation 2.16, sections 4.1.13.2 and 4.1.13.3)
- 10. <u>Hazardous Air Pollutants and Sources Categories</u> The owner or operator shall comply with the applicable requirements of Regulations 5.02 and 5.14.
- 11. <u>Information Requests</u> The owner or operator shall furnish to the District, within a reasonable time, information requested in writing by the District, to determine whether cause exists for revising, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The owner or operator shall also furnish, upon request, copies of records required to be kept by this permit. (Regulation 2.16, section 4.1.13.6) If information is submitted to the District under a claim of confidentiality, the source shall submit a copy of the confidential information directly to EPA. (Regulation 2.07, section 10.2)
- 12. <u>Insignificant Activities</u> The owner or operator shall notify the District in a timely manner of any proposed change to an insignificant activity that would require a permit revision. (Regulation 2.16, section 5)
- 13. <u>Inspection and Entry</u> Upon presentation of credentials and other documents as required by law, the owner or operator shall allow the District or an authorized representative to perform the following during reasonable hours:
  - a. Enter the premises to inspect any emissions-related activity or records required in this permit.
  - b. Have access to and copy records required by this permit.
  - c. Inspect facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required by this permit.
  - d. Sample or monitor substances or parameters to assure compliance with this permit or any applicable requirements. (Regulation 2.16, section 4.3.2)
- 14. Monitoring and Related Recordkeeping and Reporting Requirements The owner or operator shall comply with the requirements of Regulation 2.16, section 4.1.9. The owner or operator shall submit all required monitoring reports at least once every six months, unless more frequent reporting is required by an applicable requirement. The reporting period shall be January 1st through June 30th and July 1st through December 31st of each calendar year. All reports shall be postmarked by the 60th day following the end of each reporting period. If surrogate operating parameters are monitored and recorded in lieu of emission monitoring,

- then an exceedance of multiple parameters may be deemed a single violation by the District for enforcement purposes.
- 15. <u>Off-permit Documents</u> Any applicable requirements, including emission limitations, control technology requirements, or work practice standards, contained in an off-permit document cannot be changed without undergoing the permit revision procedures in Regulation 2.16, Section 5.
- 16. **Operational Flexibility** The owner or operator may make changes without permit revision in accordance with Regulation 2.16, section 5.8.
- 17. **Permit Amendments (Administrative)** This permit can be administratively amended by the District in accordance with Regulation 2.16, sections 2.3 and 5.4.
- 18. **Permit Application Submittal** The owner or operator shall submit a timely and complete application for permit renewal or significant revision. If the owner or operator submits a timely and complete application then the owner or operator's failure to have a permit is not a violation until the District takes formal action on this permit application. This protection shall cease to apply if, subsequent to completeness determination, the owner or operator fails to submit, by the deadline specified in writing by the District, additional information required to process the application as required by Regulation 2.16, sections 3 and 5.2.
- 19. **Permit Duration** This permit is issued for a fixed term of 5 years, in accordance with Regulation 2.16, section 4.1.8.3.
- 20. <u>Permit Renewal, Expiration and Application</u> Permit renewal, expiration and application procedural requirements shall be in accordance with Regulation 2.16, sections 4.1.8.2 and 5.3. This permit may only be renewed in accordance with section 5.3.
- 21. **Permit Revisions** No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. (Regulation 2.16, section 4.1.16)
- 22. **Permit Revision Procedures (Minor)** Except as provided in 40 CFR Part 72, the Acid Rain Program, this permit may be revised in accordance with Regulation 2.16, section 5.5.
- 23. **Permit Revision Procedures (Significant)** A source seeking to make a significant permit revision shall meet all the Title V requirements for permit applications, issuance and renewal, in accordance with Regulation 2.16, section 5.7, and all other applicable District Regulations.
- 24. **Permit Revocation and Termination by the District** The District may terminate this permit only upon written request of the owner or operator. The District may revoke a permit for cause, in accordance with Regulation 2.16, section 5.11.1.1 through 5.11.1.5. For purposes of Section 5, substantial or unresolved noncompliance includes, but is not limited to:

- a. Knowingly operating process or air pollution control equipment in a manner not allowed by an applicable requirement or that results in excess emissions of a regulated air pollutant that would endanger the public or the environment.
- b. Failure or neglect to furnish information, analyses, plans, or specifications required by the District.
- c. Knowingly making any false statement in any permit application.
- d. Noncompliance with Regulation 1.07, section 4.2; or
- e. Noncompliance with KRS Chapter 77.
- 25. **Permit Shield** The permit shield shall apply in accordance with Regulation 2.16, section 4.6.1.
- 26. **Prevention of Significant Deterioration of Air Quality** The owner or operator shall comply with the requirements of Regulation 2.05.
- 27. **Property Rights** This permit shall not convey property rights of any sort or grant exclusive privileges in accordance with Regulation 2.16, section 4.1.13.5.
- 28. <u>Public Participation</u> Except for modifications qualifying for administrative permit amendments or minor permit revision procedures, all permit proceedings shall meet the requirements of Regulations 2.07, Section 1; and 2.16, sections 5.1.1.2 and 5.5.4.
- 29. **Reopening For Cause** This permit shall be reopened and revised by the District in accordance with Regulation 2.16 section 5.9.
- 30. **Reopening for Cause by EPA** This permit may be revised, revoked and reissued or terminated for cause by EPA in accordance with Regulation 2.16 section 5.10.
- 31. **Risk Management Plan (112(r))** For each process subject to Section 112(r) of the Act, the owner or operator shall comply with 40 CFR Part 68 and Regulation 5.15.
- 32. **Severability Clause** The conditions of this permit are severable. Therefore, if any condition of this permit, or the application of any condition of this permit to any specific circumstance, is determined to be invalid, the application of the condition in question to other circumstances, as well as the remainder of this permit's conditions, shall not be affected. (Regulation 2.16, section 4.1.12)
- 33. <u>Stack Height Considerations</u> The owner or operator shall comply with the requirements of Regulation 2.10.
- 34. <u>Startups, Shutdowns, and Malfunctions Requirements</u> The owner or operator shall comply with the requirements of Regulation 1.07.

## 35. Submittal of Reports, Data, Notifications, and Applications

a. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit as set forth in Regulation 2.16 sections 3.1, 3.4, 3.5, 4.1.13.6, 5.8.5 and 5.11.7 shall be submitted to:

Air Pollution Control District of Jefferson County 850 Barret Ave Louisville, KY 40204-1745

b. Documents which are specifically required to be submitted to EPA as set forth in Regulation 2.16 sections 3.3, and 5.8.5 shall be mailed to EPA at the following address:

US EPA - Region IV APTMD - 12th floor Atlanta Federal Center 61 Forsyth Street Atlanta, GA 30303-3104

36. Other Applicable Regulations - The owner or operator shall comply with all applicable requirements of the following regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	
1.01	General Application of Regulations and Standards	
1.02	Definitions	
1.03	Abbreviations and Acronyms	
1.04	Performance Tests	
1.05	Compliance with Emission Standards and Maintenance Requirements	
1.06	Source Self-Monitoring and Reporting	
1.07	Emissions During Startups, Shutdowns, Malfunctions, and Emergencies	
1.08	Administrative Procedures	
1.09	Prohibition of Air Pollution	
1.10	Circumvention	
1.11	Control of Open Burning	
1.14	Control of Fugitive Particulate Emissions	
2.01	General Application	
2.02	Air Pollution Regulation Requirements and Exemptions	

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	
2.03	Permit Requirements - Non-Title V Construction and Operating Permits and Demolition/Renovation Permits	
2.07	Public Notification for Title V, PSD, and Offset Permits; SIP Revisions; and Use of Emission Reduction Credits	
2.09	Causes for Permit Suspension	
2.10	Stack Height Considerations	
2.11	Air Quality Model Usage	
2.16	Title V Operating Permits	
4.01	General Provisions for Emergency Episodes	
4.02	Episode Criteria	
4.03	General Abatement Requirements	
4.07	Episode Reporting Requirements	
5.01	General Provisions (for Hazardous Air Pollutants)	
5.03	Potential Hazardous Emissions	
6.01	General Provisions (for Existing Affected Facilities)	
6.02	Emission Monitoring for Existing Sources	
7.01	General Provisions (for New Affected Facilities)	

DISTRICT ONLY ENFORCEABLE REGULATIONS			
Regulation Title			
1.12	Control of Nuisances		
1.13	Control of Objectionable Odors in the Ambient Air		
2.08	Emissions Fees, Permit Fees, Permit Renewal Procedures, and Additional Programs Fees		
8.03	Commuter Vehicle Testing Requirements		

Emission Unit U-1 Description: Boiler Room

# **Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.06	Standards of Performance for New Indirect Heat Exchangers	1, 2, 3.1, 4.1.4, 4.2, 5.1.1, 8

## **Allowable Emissions:**

Pollutant	Limit/Standard
Opacity	< 20% (Regulation 7.06, section 4.2)
PM	0.343 lbs/MMBtu (Regulation 7.06, section 4.1.4)
$SO_2$	1 lb/MMBtu (Regulation 7.06, section 5.1.1)

## **Components:**

- **E-1** One boiler, rated capacity of 12.533 MMBtu/hr, natural gas or # 2 fuel oil fired, installed in 1988. Vented out stack S-1.
- **E-2** One boiler, rated capacity of 12.533 MMBtu/hr, natural gas or # 2 fuel oil fired, installed in 1988. Vented out stack S-2.

#### **Additional Conditions**

- **1. Standards** (Regulation 2.16, section 4.1.1)
  - a. **Opacity** (Regulation 7.06, section 4.2)

The owner or operator shall not cause emissions which exhibit greater than 20% opacity except:

- i. for indirect heat exchangers with a heat input capacity of less than 250 million Btu/hr, a maximum of 40% opacity shall be permissible for not more than two consecutive minutes in any 60 consecutive minutes;
- ii. for indirect heat exchangers with heat input capacity of less than 250 million Btu/hr, a maximum of 40% opacity shall be permissible for not more than six consecutive minutes during cleaning the fire box or blowing soot; or
- iii. for emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.
- b. **PM** (Regulation 7.06, section 4.1.4)

The owner or operator shall limit PM emissions from emission points E-1 and E-2 to 0.343 lb/MMBtu.

c. **SO**<sub>2</sub> (Regulation 7.06, section 5.1.1)

The owner or operator shall limit SO<sub>2</sub> emissions from emission points E-1 and E-2 to 1 lb/MMBtu.

- **2. Monitoring** (Regulation 2.16, section 4.1.9.1.2)
  - a. **Opacity**

For each week, when fuel oil is being combusted, conduct a one-minute visible emissions survey of all emission points with a maximum of four emission points being observed simultaneously. At emission points where visible emissions are observed, a certified opacity reader shall perform a Method 9 for stack emissions within 24 hours. Any Method 9 visible emissions tests shall be conducted according to 40 CFR 60, Appendix A. All visible emissions surveys and tests shall be conducted during normal operation of the emission unit.

#### b. **PM**

The monitoring of compliance for the PM standard shall be the record keeping requirement in additional condition 3.b. (See comment).

#### c. $SO_2$

The monitoring of compliance for the  $SO_2$  standard shall be the record keeping requirement in additional condition 3.c. (See comment).

## **3. Record Keeping** (Regulation 2.16, section 4.1.9.2)

## a. **Opacity**

- i. The owner or operator shall keep records of the amount of natural gas and/or fuel oil that is combusted each month.
- ii. The owner or operator shall maintain records of the results of all visible emissions surveys and tests. Records of the results of any visible emissions survey shall include the date and time of the survey, the name of the person conducting the survey, and whether or not visible emissions were observed.

#### b. PM

The owner or operator shall keep supplier certification records of the amount of natural gas and/or fuel oil that is combusted each month.

#### $c. SO_2$

The owner or operator shall keep records of the sulfur content of each shipment of #2 fuel oil. These records shall be available to the District upon request.

## **4. Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the semi-annual reports. All reports shall be certified by a responsible official as defined in Regulation 2.16, section 2.36. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for each of the following categories.

#### a. **Opacity**

The owner or operator shall report semi-annually the following for opacity:

i. Emission Unit ID number and Stack ID number

- ii. The beginning and ending date of the reporting period
- iii. The date, time, and results of each Method 9 conducted
- iv. Description of any corrective action taken pursuant to Additional Condition 2.a.

## b. PM

No compliance reporting is required.

## c. $SO_2$

No compliance reporting is required.

## **Comment**

The company has demonstrated that the emission limits for PM and  $SO_2$  can not be exceeded when combusting #2 fuel oil with one-half percent sulfur.

Emission Unit U-2 Description: Hot Air Furnace

## **Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.28	Standard of Performance for Existing Hot Air Aluminum Atomization Processes	1, 2, 3

#### **Allowable Emissions:**

Pollutant	Limit/Standard
Opacity	≤ 20% (Regulation 6.28, section 3.1)
PM	13.76 lb/ton of aluminum processed (Regulation 6.28, section 3.2)

## **Components:**

- **E-3** One Hot Air Furnace, rated pot capacity of 40,000 lb, 8 MMBtu/hr natural gas fired furnace, installed in 1955. Vented out stack S-3.
- **E-4** One Screen (Room M-7), rated capacity of 1500 lb/hr, installed in 1955. Fugitive emission point.
- **E-5** One Multicyclone (Room M-7) to control emissions from emission point E-4, rated capacity of 10,800 scfm, installed in 1999. Vented out stack S-4.
- **E-6** One Screen (Room M-8), rated capacity of 1500 lb/hr, installed in 1955. Fugitive emission point.
- **E-7** One Multicyclone (Room M-8) to control emissions from emission point E-6, rated capacity of 10,800 scfm, installed in 1955. Vented out stack S-5.

#### **Additional Conditions**

### **1. Standards** (Regulation 2.16, section 4.1.1)

a. **Opacity** (Regulation 6.28, section 3.1)

The owner or operator, for each particulate matter (PM) Emission Point subject to Regulation 6.28 (section 3.1), shall not cause or permit the discharge of emissions equal to or greater than 20% opacity.

b. **PM** (Regulation 6.28, section 3.2)

The owner or operator shall limit the combined PM emissions from emission points E-5 and E-7 to 13.76 lb/ton of aluminum processed.

## **2. Monitoring** (Regulation 2.16, section 4.1.9.1.2)

## a. **Opacity**

- i. To demonstrate compliance with the opacity standard, the owner or operator shall conduct a weekly one-minute visible emissions survey, during normal operation and daylight hours, of the PM Emission Points (stacks) identified in the U-2 components listing. No more than four Emission Points shall be observed simultaneously.
- ii. For Emission Points without observed visible emissions during twelve consecutive operating weeks, the owner or operator may elect to conduct a monthly one-minute visible emission survey, during normal operation and daylight hours. No more than four Emission Points shall be observed simultaneously.
- iii. At Emission Points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 for stack emissions or Method 22 for fugitive emissions within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance. Subsequent visible emission surveys shall be conducted as indicated in item 2.a.i.
- iv. If an Emission Point is not being operated during a given day (or week, as appropriate), then no visible emission survey needs to be performed and a negative declaration may be entered in the record.

#### b. **PM**

- i. The owner or operator shall visually inspect, on a monthly basis, the multicyclones, for any deterioration in the device. Any noted material failures shall have repairs instituted within 7 days after the discovery.
- ii. The owner or operator shall perform stack tests for emission points E-5 and E-7 using Reference Method 1 through 5 for PM once on or before the third year of the permit period.

## **3. Record Keeping** (Regulation 2.16, section 4.1.9.2)

## a. **Opacity**

Records of the results of all visible emission surveys and tests performed shall be maintained and shall include:

- i. The date and time of the survey
- ii. The name of the person conducting the survey
- iii. Whether visible emissions were observed.
- iv. Description of any corrective action taken pursuant to Additional Condition 2.a.iii.

#### b. **PM**

The owner or operator shall maintain records of:

- i. monthly visual inspections of the control devices. These records shall include:
  - 1) Name of inspector
  - 2) Date of inspection
  - 3) Inspection results
  - 4) Any repairs instituted due to inspection results.
- ii. the amount of natural gas that is combusted each month.
- iii. the tons of aluminum processed.

## **4. Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the semi-annual reports. All reports shall be certified by a responsible official as defined in Regulation 2.16, section 2.36. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for each of the following categories. The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for:

## a. **Opacity**

- i Emission Unit ID number and Stack ID number
- ii. The beginning and ending date of the reporting period
- iii. The date, time, and results of each Method 9 or Method 22 conducted
- iv. Description of any corrective action taken pursuant to Additional Condition 2.a.iii.

#### b. **PM**

- i Emission Unit ID number and Emission point ID number
- ii. The beginning and ending date of the reporting period
- iii. Identification of all periods of exceedances of the emission standard for each emission point including the quantity of excess emissions
- iv. Description of any corrective action taken for each exceedance

# **Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.08	Standards of Performance for New Process Operations	1, 2, 3.1.1, 3.3.1

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.12	Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants	1, 2, 3, 4, 5
5.14	Hazardous Air Pollutants and Source Categories	1, 2, 3, 4

## **Allowable Emissions:**

Pollutant	Limit/Standard
Opacity	$\leq$ 20% (Regulation 7.08 section 3.1.1)
Auminum	2.9 lb/hr - plant wide (Regulation 5.12)
PM	4.62 lb/hr (Regulation 7.08, section 3.1.2)

# **Components:**

E-8 - One Storage Tank Conveyor Pod with cyclone, installed in 1995. Vented out stack S-6.

**E-9** - One Rail Car loading with a rated capacity of 200,000 lb with two cyclones, installed in 1960. Vented out stack S-7.

#### **Additional Conditions**

### **1. Standards** (Regulation 2.16, section 4.1.1)

a. **Opacity** (Regulation 7.08 section 3.1.1)

The owner or operator shall not cause or permit the discharge of emissions equal to or in excess of 20% opacity.

b. **PM** (Regulation 7.08, section 3.1.2)

The owner or operator shall limit the combined PM emissions from emission points E-8 and E-9 to 4.62 lb/hr.

- c. **TAPs** (Regulation 5.12)
  - i. The owner or operator shall limit emissions of aluminum to no more than 2.9 lb/hr, as modeled 31 January 1995.
  - ii. If modeling parameters change, the owner or operator shall remodel with potential emissions being utilized in the recommended way to model.
- **2. Monitoring** (Regulation 2.16, section 4.1.9.1.2)

#### a. **Opacity**

- i. To demonstrate compliance with the opacity standard, the owner or operator shall conduct a weekly one-minute visible emissions survey, during normal operation and daylight hours, of the PM emission points identified in the U-3 components listing. No more than four emission points shall be observed simultaneously.
- ii. For Emission Points without observed visible emissions during twelve consecutive operating weeks, the owner or operator may elect to conduct a monthly one-minute visible emission survey, during normal operation and daylight hours. No more than four Emission Points shall be observed simultaneously.
- iii. At Emission Points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 for stack emissions or Method 22 for fugitive emissions within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance. Subsequent visible emission surveys shall be conducted as indicated in item 2.a.i.

iv. If an Emission Point is not being operated during a given day (or week, as appropriate), then no visible emission survey needs to be performed and a negative declaration may be entered in the record.

#### b. **PM**

- i. The owner or operator shall visually inspect the cyclones for deterioration monthly. Any noted material failures shall have repairs instituted within 7 days upon discovery.
- ii. The owner or operator shall perform stack tests for emission points E-8 and E-9 using Reference Method 1 through 5 for PM once on or before the third year of the permit period.

#### c. TAPs

See additional condition 3.c.

## **3. Record Keeping** (Regulation 2.16, section 4.1.9.3)

#### a. **Opacity**

The owner or operator shall keep records of the following:

- i. The date, time, and results of each visible emissions survey conducted
- ii. The date, time, and results of each Method 9 or Method 22 conducted
- iii. who performed the test or survey
- iv. Description of any corrective action taken pursuant to Additional Condition 2.a.iii.

#### b. **PM**

- i. The owner or operator shall keep daily records of all production rates. They shall then calculate the amount of hourly PM emitted, based on the hours of actual operation of the processes during each day and the design collection efficiency of any filtration devices used, to control emissions below the standard.
- ii. The owner or operator shall maintain records of monthly visual inspections of the control devices. These records shall include:
  - 1) Name of inspector
  - 2) Date of inspection
  - 3) Inspection results
  - 4) Any repairs instituted due to inspection results.

#### c. TAPs

The owner or operator shall keep monthly records of raw materials composition and production and raw material use for emission points E-8, E-11 through E-16, E-25 through E-27, and E38 and E39, to demonstrate that the original modeling analysis is still accurate. These records shall be available for review by the District upon request.

## **4. Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the semi-annual reports. All reports shall be certified by a responsible official as defined in Regulation 2.16, section 2.36. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for each of the following categories. The owner or operator shall report semi-annually the following:

#### a. **Opacity**

- i. Emission Unit ID number and Stack ID number
- ii. The beginning and ending date of the reporting period
- iii. The date, time, and results of each Method 9 or Method 22 conducted
- iv. Description of any corrective action taken pursuant to Additional Condition 2.a.iii.

#### b. **PM**

For Emission points subject to Regulation 7.08:

- i. Emission Unit ID number and Emission point ID number
- ii. The beginning and ending date of the reporting period
- iii. Identification of all periods of exceedances of the hourly PM emission standard for each emission point including the quantity of excess emissions
- iv. Description of any corrective action taken for each exceedance

#### c. TAPs

There are no reporting requirements for TAP emissions based on the plant allowable versus plant actual emissions, as modeled.

#### **Comments**

Modeling was performed for aluminum powder emissions on 31 January 1995. The modeling parameters used were based on a plant wide estimated emission of aluminum of 1.77 lb/hr. Modeling determined that 2.9 lb/hr would be the maximum emission rate for the plant, for aluminum, and still be in compliance with regulation 5.12.

Where a disparity between PM emission limits and TAPs emission limits exist, the more restrictive shall apply.

The addition of Emission Point E-8, in 1995 was a modification to Emission Point E-9. In so doing, E-9 no longer was subject to existing source Regulation 6.09 and became subject to new source Regulation 7.08.

Emission Unit U-4 Description: Hot Air Bin Fill

**Applicable Regulations:** 

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.09	Standards of Performance for Existing Process Operations	1, 2, 3.1, 3.4, 5
7.08	Standards of Performance for New Process Operations	1, 2, 3.1.1, 3.3.1

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.12	Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants	1, 2, 3, 4, 5
5.14	Hazardous Air Pollutants and Source Categories	1, 2, 3, 4

## **Allowable Emissions:**

Pollutant	Limit/Standard
Opacity	$\leq$ 20% (Regulation 6.09, section 3.1 or 7.08, section 3.1.1)
Aluminum	2.9 lb/hr - plant wide (Regulation 5.12)
PM	See Additional Conditions 1.b

# **Components:**

E-10 - One small powder storage tank with three cyclones, installed in 1955. Vented out stack S-8.

- **E-11** Air vent cyclone #1 to control emissions from large powder storage tank #1, installed in 1989. Vented out stack S-9.
- **E-12** Air vent cyclone #2 to control emissions from large powder storage tank #2, installed in 1989. Vented out stack S-10.
- **E-13** One Tote/drum fill station #1, capacity of 5000 lb, installed in 1989. Fugitive emission point.
- **E-14** One Tote/drum fill cyclone #1 to control emissions from emission point E-13, capacity of 55lb, installed in 1989. Vented out stack S-11.
- E-15 One Tote/drum fill station #2, capacity of 5000 lb, installed in 1989. Fugitive emission point.
- **E-16** One Tote/drum fill cyclone #2 to control emissions from emission point E-15, capacity of 55lb, installed in 1989. Vented out stack S-12.
- **E-17** One Tote/drum fill station #3, capacity of 5000 lb, installed in 1955. Fugitive emission point.
- **E-18** One Tote/drum fill cyclone #3 to control emissions from emission point E-17, capacity of 55 lb, installed in 1955. Vented out stack S-13.

#### **Additional Conditions**

### **1. Standards** (Regulation 2.16, section 4.1.1)

a. **Opacity** (Regulation 6.09, section 3.1 or 7.08, section 3.1.1)

The owner or operator shall not cause or permit the discharge of emissions equal to or in excess of 20% opacity.

#### b. **PM**

The owner or operator shall:

i. Limit PM emissions from the combined emission points E-10, E-11 and E-12 to 2.58 lb/hr.

(Regulation 6.09, section 3.4)

ii. Limit PM emissions from the combined emission points E-17 and E-18 to 2.58 lb/hr.

(Regulation 6.09, section 3.4)

iii. Limit PM emissions from the combined emission points E-13 and E-14 to 3.0 lb/hr.

(Regulation 7.08, section 3.1.2)

iv. Limit PM emissions from the combined emission points E-15 and E-16 to 3.0 lb/hr.

(Regulation 7.08, section 3.1.2)

c. **TAPs** (Regulation 5.12)

The owner or operator shall limit emissions of aluminum to no more than 2.9 lb/hr, as modeled 31 January 1995.

## **2. Monitoring** (Regulation 2.16, section 4.1.9.1.2)

#### a. **Opacity**

- i. To demonstrate compliance with the opacity standard, the owner or operator shall conduct a weekly one-minute visible emissions survey, during normal operation and daylight hours, of the PM Emission Points (stacks) identified in the U-4 components listing. No more than four Emission Points shall be observed simultaneously.
- ii. For Emission Points without observed visible emissions during twelve consecutive operating weeks, the owner or operator may elect to conduct a monthly one-minute visible emission survey, during normal operation and

daylight hours. No more than four Emission Points shall be observed simultaneously.

- iii. At Emission Points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 for stack emissions or Method 22 for fugitive emissions within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance. Subsequent visible emission surveys shall be conducted as indicated in item 2.a.i.
- iv. If an Emission Point is not being operated during a given day (or week, as appropriate), then no visible emission survey needs to be performed and a negative declaration may be entered in the record.

#### b. **PM**

- i. See additional condition 3.b.i.
- ii. The owner or operator shall visually inspect the cyclones for deterioration monthly. Any noted material failures shall have repairs instituted within 7 days upon discovery.

#### c. TAPs

See additional condition 3.c.

## **3. Record Keeping** (Regulation 2.16, section 4.1.9.3)

#### a. **Opacity**

The owner or operator shall keep records of the following:

- i. The date, time, and results of each visible emissions survey conducted
- ii. The date, time, and results of each Method 9 or Method 22 conducted
- iii. who performed the test or survey
- iv. Description of any corrective action taken pursuant to Additional Condition 2.a.iii.

#### b. **PM**

- i. The owner or operator shall keep daily records of all production rates. They shall then calculate the amount of hourly PM emitted, based on the hours of actual operation of the processes during each day and the design collection efficiency of any filtration devices used, to control emissions below the standard.
- ii. The owner or operator shall maintain records of monthly visual inspections of the control devices. These records shall include:
  - 1) Name of inspector
  - 2) Date of inspection
  - 3) Inspection results
  - 4) Any repairs instituted due to inspection results.

#### c. TAPs

The owner or operator shall keep monthly records of raw materials composition and production and raw material use for emission points E-8, E-11 through E-16, E-25 through E-27, and E38 and E39, to demonstrate that the original modeling analysis is still accurate. These records shall be available for review by the District upon request.

## **4. Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the semi-annual reports. All reports shall be certified by a responsible official as defined in Regulation 2.16, section 2.36. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for each of the following categories. The owner or operator shall report semi-annually the following:

## a. **Opacity:**

- i. Emission Unit ID number and Stack ID number
- ii. The beginning and ending date of the reporting period
- iii. The date, time, and results of each Method 9 or Method 22 conducted
- iv. Description of any corrective action taken pursuant to Additional Condition 2.a.iii.

#### b. PM

For Emission points subject to Regulations 6.09 and 7.08:

- i. Emission Unit ID number and Emission point ID number
- ii. The beginning and ending date of the reporting period
- iii. Identification of all periods of exceedances of the hourly PM emission standard for each emission point including the quantity of excess emissions
- iv. Description of any corrective action taken for each exceedance

## c. TAPs

There are no reporting requirements for TAP emissions based on the plant allowable versus plant actual emissions, as modeled.

## **Comments**

Where a disparity between PM emission limits and TAPs emission limits exist, the more restrictive shall apply.

Emission Unit U-6 Description: Classifier

**Applicable Regulations:** 

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.08	Standards of Performance for New Process Operations	1, 2, 3.1.1, 3.3.1

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.12	Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants	1, 2, 3, 4, 5
5.14	Hazardous Air Pollutants and Source Categories	1, 2, 3, 4

# **Allowable Emissions:**

Pollutant	Limit/Standard
Opacity	≤ 20% (Regulation 7.08, section 3.1.1)
Aluminum	2.9 lb/hr - plant wide (Regulation 5.12)
PM	4.12 lb/hr, (Regulation 7.08, section 3.1.2)

# **Components:**

E-25 - One 15000 pound Powder Storage tank with cyclone. Vented out stack S-17.

**E-26** - Two holding tanks. Fugitive emission point.

#### **Additional Conditions**

### **1. Standards** (Regulation 2.16, section 4.1.1)

a. **Opacity** (Regulation 7.08, section 3.1.1)

The owner or operator shall not cause or permit the discharge of emissions equal to or in excess of 20% opacity.

b. **PM** (Regulation 7.08, section 3.1.2)

The owner or operator shall limit combined PM emissions from emission points E-25 and E-26 to 4.12 lb/hr.

c. **TAPs** (Regulation 5.12)

The owner or operator shall limit emissions of aluminum to no more than 2.9 lb/hr, as modeled 31 January 1995.

## **2. Monitoring** (Regulation 2.16, sections 4.1.9.1.2)

## a. **Opacity**

- i. To demonstrate compliance with the opacity standard, the owner or operator shall conduct a weekly one-minute visible emissions survey, during normal operation and daylight hours, of the PM Emission Points (stacks) identified in the U-6 components listing. No more than four Emission Points shall be observed simultaneously.
- ii. For Emission Points without observed visible emissions during twelve consecutive operating weeks, the owner or operator may elect to conduct a monthly one-minute visible emission survey, during normal operation and daylight hours. No more than four Emission Points shall be observed simultaneously.
- iii. At Emission Points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 for stack emissions or Method 22 for fugitive emissions within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance. Subsequent visible emission surveys shall be conducted as indicated in item 2.a.i.

iv. If an Emission Point is not being operated during a given day (or week, as appropriate), then no visible emission survey needs to be performed and a negative declaration may be entered in the record.

#### b. PM

- i. See additional condition 3.b.i.
- ii. The owner or operator shall visually inspect the cyclones for deterioration monthly. Any noted material failures shall have repairs instituted within 7 days upon discovery.
- iii. The owner or operator shall perform stack tests for emission points E-25 using Reference Method 1 through 5 for PM once during the third year of the permit period.

#### c. TAPs

See additional condition 3.c.

## **3. Record Keeping** (Regulation 2.16, section 4.1.9.2)

#### a. **Opacity**

The owner or operator shall keep records of the following:

- i. The date, time, and results of each visible emissions survey conducted
- ii. The date, time, and results of each Method 9 or Method 22 conducted
- iii. who performed the test or survey
- iv. Description of any corrective action taken pursuant to Additional Condition 2.a.iii.

#### b. **PM**

- i. The owner or operator shall keep daily records of all production rates. They shall calculate the amount of hourly PM emitted, based on the hours of actual operation. of the process during each day and the design collection efficiency of any filtration devices used to control emissions below the standard.
- ii. The owner or operator shall maintain records of monthly visual inspections of the control devices. These records shall include:
  - 1) Name of inspector
  - 2) Date of inspection
  - 3) Inspection results
  - 4) Any repairs instituted due to inspection results.

#### c. TAPs

The owner or operator shall keep monthly records of raw materials composition and production and raw material use for emission points E-8, E-11 through E-16, E-25 through E-27, and E38 and E39, to demonstrate that the original modeling analysis is still accurate. These records shall be available for review by the District upon request.

## **4. Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the semi-annual reports. All reports shall be certified by a responsible official as defined in Regulation 2.16, section 2.36. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for each of the following categories. The owner or operator shall report semi-annually the following:

## a. **Opacity**

- i. Emission Unit ID number and Stack ID number
- ii. The beginning and ending date of the reporting period
- iii. The date, time, and results of each Method 9 or Method 22 conducted (or a negative declaration if none)
- iv. Description of any corrective action taken pursuant to Additional Condition 2.a.iii.

#### b. **PM**

- i. Emission Unit ID number and Emission point ID number
- ii. The beginning and ending date of the reporting period
- iii. Identification of all periods of exceedances of the hourly PM emission standard for each emission point including the quantity of excess emissions
- iv. Description of any corrective action taken for each exceedance

#### c. TAPs

There are no reporting requirements for TAP emissions based on the plant allowable versus plant actual emissions, as modeled.

#### **Comment**

Where a disparity between PM emission limits and TAPs emission limits exist, the more restrictive shall apply.

Emissions Unit U-7 Description: Blender

**Applicable Regulations:** 

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation Title Applicable Section		Applicable Sections
7.08	Standards of Performance for New Process Operations	1, 2, 3.1.1, 3.3.1

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation Title		Applicable Sections
5.12	Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants	1, 2, 3, 4, 5
5.14	Hazardous Air Pollutants and Source Categories	1, 2, 3, 4

# **Allowable Emissions:**

Pollutant	Limit/Standard
Opacity	$\leq$ 20% (Regulation 7.08, section 3.1.1)
Aluminum	2.9 lb/hr - plant wide (Regulation 5.12)
PM	4.12 lb/hr (Regulation 7.08, section 3.1.2)

# **Components:**

**E-27** - One Tumbler Blender, rated capacity of 75 cubic feet. Fugitive emission point.

#### **Additional Conditions**

## **1. Standards** (Regulation 2.16, section 4.1.1)

## a. **Opacity** (Regulation 7.08, section 3.1.1)

The owner or operator shall not cause or permit the discharge of emissions equal to or in excess of 20% opacity.

## b. **PM** (Regulation 7.08, section 3.1.2)

The owner or operator shall limit PM emissions from emission point E-27 to 4.12 lb/hr.

## c. **TAPs** (Regulation 5.12)

The owner or operator shall limit emissions of aluminum to no more than 2.9 lb/hr, as modeled 31 January 1995.

## **2. Monitoring** (Regulation 2.16, section 4.1.9.1.2)

### a. **Opacity**

- i. To demonstrate compliance with the opacity standard, the owner or operator shall conduct a weekly one-minute visible emissions survey, during normal operation and daylight hours, of the PM Emission Points (stacks) identified in the U-7 components listing. No more than four Emission Points shall be observed simultaneously.
- ii. For Emission Points without observed visible emissions during twelve consecutive operating weeks, the owner or operator may elect to conduct a monthly one-minute visible emission survey, during normal operation and daylight hours. No more than four Emission Points shall be observed simultaneously.
- iii. At Emission Points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 for stack emissions or Method 22 for fugitive emissions within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance. Subsequent visible emission surveys shall be conducted as indicated in item 2.a.i.

iv. If an Emission Point is not being operated during a given day (or week, as appropriate), then no visible emission survey needs to be performed and a negative declaration may be entered in the record.

## b. **PM**

The owner or operator shall keep daily records of all production rates. They shall then calculate the amount of hourly PM emitted, based on the hours of actual operation of the processes during each day.

## c. TAPs

See additional condition 3.c.

## **3. Record Keeping** (Regulation 2.16, section 4.1.9.2)

### a. **Opacity**

The owner or operator shall keep records of the following:

- i. The date, time, and results of each visible emissions survey conducted
- ii. The date, time, and results of each Method 9 or Method 22 conducted
- iii. who performed the test or survey
- iv. Description of any corrective action taken pursuant to Additional Condition 2.a.iii.

### b. **PM**

See additional condition 2.b

## c. TAPs

The owner or operator shall keep monthly records of raw materials composition and production and raw material use for emission points E-8, E-11 through E-16, E-25 through E-27, and E38 and E39, to demonstrate that the original modeling analysis is still accurate. These records shall be available for review by the District upon request.

## **4. Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the semi-annual reports. All reports shall be certified by a responsible official as defined in Regulation 2.16, section 2.36. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for each of the following categories. The owner or operator shall report semi-annually the following:

## a. **Opacity**

- i. Emission Unit ID number and Stack ID number
- ii. The beginning and ending date of the reporting period
- iii. The date, time, and results of each Method 9 or Method 22 conducted (or a negative declaration if none)
- iv. Description of any corrective action taken pursuant to Additional Condition 2.a.iii.

## b. **PM**

- i. Emission Unit ID number and Emission point ID number
- ii. The beginning and ending date of the reporting period
- iii. Identification of all periods of exceedances of the hourly PM emission standard for each emission point including the quantity of excess emissions
- iv. Description of any corrective action taken for each exceedance

## c. TAPs

There are no reporting requirements for TAP emissions based on the plant allowable versus plant actual emissions, as modeled.

### **Comment**

Where a disparity between PM emission limits and TAPs emission limits exist, the more restrictive shall apply.

## **Emission Unit U-8 Description:** Rescreens

## **Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.09	Standards of Performance for Existing Process Operations	1, 2, 3.1, 3.4

## **Allowable Emissions:**

Pollutant	Limit/Standard
Opacity	< 20% (Regulation 6.09, section 3.1)
PM	3.38 lb/hr (Regulation 6.09, section 3.4)

## **Components:**

- E-28 Rescreen #1 with fan, rated capacity of 1500 lb/hr, installed in 1944. Vented out stack S-18.
- **E-29** Rescreen #2 with fan, rated capacity of 1500 lb/hr, installed in 1944. Vented out stack S-19.
- E-30 Rescreen #3 with fan, rated capacity of 1500 lb/hr, installed in 1944. Vented out stack S-20.
- E-31 Rescreen #4 with fan, rated capacity of 1500 lb/hr, installed in 1944. Vented out stack S-21.
- E-32 Rescreen #5 with fan, rated capacity of 1500 lb/hr, installed in 1944. Vented out stack S-22.
- E-33 Rescreen #6 with fan, rated capacity of 1500 lb/hr, installed in 1944. Vented out stack S-23.
- E-34 Rescreen #7 with fan, rated capacity of 1500 lb/hr, installed in 1944. Vented out stack S-24.

## **Additional Conditions**

**1. Standards** (Regulation 2.16, section 4.1.1)

## a. **Opacity** (Regulation 6.09, section 3.1)

The owner or operator shall not cause or permit the discharge of emissions equal to or in excess of 20% opacity.

## b. **PM** (Regulation 6.09, section 3.4)

The owner or operator shall limit PM emissions from emission points E-28 through E-34 to 3.38 lb/hr each.

## **2. Monitoring** (Regulation 2.16, sections 4.1.9.1.2)

## a. **Opacity**

- i. To demonstrate compliance with the opacity standard, the owner or operator shall conduct a weekly one-minute visible emissions survey, during normal operation and daylight hours, of the PM Emission Points (stacks) identified in the U-9 components listing. No more than four Emission Points shall be observed simultaneously.
- ii. For Emission Points without observed visible emissions during twelve consecutive operating weeks, the owner or operator may elect to conduct a monthly one-minute visible emission survey, during normal operation and daylight hours. No more than four Emission Points shall be observed simultaneously.
- iii. At Emission Points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 for stack emissions or Method 22 for fugitive emissions within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance. Subsequent visible emission surveys shall be conducted as indicated in item 2.a.i.
- iv. If an Emission Point is not being operated during a given day (or week, as appropriate), then no visible emission survey needs to be performed and a negative declaration may be entered in the record.

## b. PM

- i. The owner or operator shall keep records, on a daily basis, of all production rates. They shall then calculate the amount of hourly PM emitted, based on the hours of actual operation of the processes during each day.
- ii. The owner or operator shall perform stack tests for emission points E-28 through E-34 using Reference Method 1 through 5 for PM once during the third year of the permit period.

## **3. Record Keeping** (Regulation 2.16, section 4.1.9.2)

## a. **Opacity**

The owner or operator shall keep records of the following:

- i. The date, time, and results of each visible emissions survey conducted
- ii. The date, time, and results of each Method 9 or Method 22 conducted
- iii. who performed the test or survey
- iv. Description of any corrective action taken pursuant to Additional Condition 2.a.iii.

### b. **PM**

See additional condition 2.b

## **4. Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the semi-annual reports. All reports shall be certified by a responsible official as defined in Regulation 2.16, section 2.36. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for each of the following categories. The owner or operator shall report semi-annually the following:

### a. **Opacity**

- i. Emission Unit ID number and Stack ID number
- ii. The beginning and ending date of the reporting period
- iii. The date, time, and results of each Method 9 or Method 22 conducted (or a negative declaration if none)
- iv. Description of any corrective action taken pursuant to Additional Condition 2.a.iii.

### b. **PM**

- i. Emission Unit ID number and Emission point ID number
- ii. The beginning and ending date of the reporting period

- iii. Identification of all periods of exceedances of the hourly PM emission standard for each emission point including the quantity of excess emissions
- iv. Description of any corrective action taken for each exceedance

Emission Unit U-10 Description: MMC Process (billet manufacturing)

**Applicable Regulations:** 

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.08	Standards of Performance for New Process Operations	1, 2, 3.1.1, 3.3.1

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation Title		Applicable Sections
5.12	Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants	1, 2, 3, 4, 5
5.14	Hazardous Air Pollutants and Source Categories	1, 2, 3, 4

# **Allowable Emissions:**

Pollutant	Limit/Standard
Opacity	≤ 20% (Regulation 7.08, section 3.1.1)
Aluminum	2.9 lb/hr - plant wide (Regulation 5.12)
PM	2.34 lb/hr (Regulation 7.08, section 3.1.2)

# **Components:**

**E-38** - Atomized Powder Blender, rated capacity of 80 lb/hr. Fugitive emission point.

E-39 - Screen, rated capacity of 80 lb/hr. Fugitive emission point.

#### **Additional Conditions**

## **1. Standards** (Regulation 2.16, section 4.1.1)

## a. **Opacity** (Regulation 7.08, section 3.1.1)

The owner or operator shall not cause or permit the discharge of emissions equal to or in excess of 20% opacity.

## b. **PM** (Regulation 7.08, section 3.1.2)

The owner or operator shall limit PM emissions from emission points E-38 and E-39 to 2.34 lb/hr each.

## c. **TAPs** (Regulation 5.12)

The owner or operator shall limit emissions of aluminum to no more than 2.9 lb/hr, as modeled 31 January 1995.

## **2. Monitoring** (Regulation 2.16, sections 4.1.9.1.2)

### a. **Opacity**

- i. To demonstrate compliance with the opacity standard, the owner or operator shall conduct a weekly one-minute visible emissions survey, during normal operation and daylight hours, of the PM Emission Points (stacks) identified in the U-10 components listing. No more than four Emission Points shall be observed simultaneously.
- ii. For Emission Points without observed visible emissions during twelve consecutive operating weeks, the owner or operator may elect to conduct a monthly one-minute visible emission survey, during normal operation and daylight hours. No more than four Emission Points shall be observed simultaneously.
- iii. At Emission Points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 for stack emissions or Method 22 for fugitive emissions within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance. Subsequent visible emission surveys shall be conducted as indicated in item 2.a.i.

iv. If an Emission Point is not being operated during a given day (or week, as appropriate), then no visible emission survey needs to be performed and a negative declaration may be entered in the record.

## b. **PM**

The owner or operator shall keep records, on a daily basis, of all production rates. They shall then calculate the amount of hourly PM emitted, based on the hours of actual operation of the processes during each day.

#### c. TAPs

See additional condition 3.c.

## **3. Record Keeping** (Regulation 2.16, section 4.1.9.2)

### a. **Opacity**

The owner or operator shall keep records of the following:

- i. The date, time, and results of each visible emissions survey conducted
- ii. The date, time, and results of each Method 9 or Method 22 conducted
- iii. who performed the test or survey
- iv. Description of any corrective action taken pursuant to Additional Condition 2.a.iii.

### b. **PM**

See additional condition 2.b

## c. TAPs

The owner or operator shall keep monthly records of raw materials composition and production and raw material use for emission points E-8, E-11 through E-16, E-25 through E-27, and E38 and E39, to demonstrate that the original modeling analysis is still accurate. These records shall be available for review by the District upon request.

## **4. Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the semi-annual reports. All reports shall be certified by a responsible official as defined in Regulation 2.16, section 2.36. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for each of the following categories. The owner or operator shall report semi-annually the following:

## a. **Opacity**

- i. Emission Unit ID number and Stack ID number
- ii. The beginning and ending date of the reporting period
- iii. The date, time, and results of each Method 9 or Method 22 conducted (or a negative declaration if none)
- iv. Description of any corrective action taken pursuant to Additional Condition 2.a.iii.

### b. **PM**

- i. Emission Unit ID number and Emission point ID number
- ii. The beginning and ending date of the reporting period
- iii. Identification of all periods of exceedances of the hourly PM emission standard for each emission point including the quantity of excess emissions
- iv. Description of any corrective action taken for each exceedance

## c. TAPs

There are no reporting requirements for TAP emissions based on the plant allowable versus plant actual emissions, as modeled.

### **Comment**

Where a disparity between PM emission limits and TAPs emission limits exist, the more restrictive shall apply.

## **Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.09	Standards of Performance for Existing Process Operations	1, 2, 3.1, 3.2

## **Allowable Emissions:**

Pollutant	Limit/Standard	
Opacity	$\leq 20\%$ (Regulation 6.09, section 3.1)	
PM	See Additional Conditions 1.b.i and 1.b.ii	

## **Components:**

**E-46** - One "Hog" coarse grinder with course cyclone, rated capacity of 1110 lb/hr, installed in 1965. Vented out stack S-26.

**E-47** - Two fine grinders with a cyclone that is both the fine cyclone and process cyclone, rated capacity of 1110 lb/hr, installed in 1962. Vented out stack S-27.

E-48 - One screen, rated capacity of 1110 lb/hr, installed in 1971. Fugitive emission point.

**E-49** - Atomized Aluminum Storage silo with a cyclone. Vented out stack S-28.

**E-50** - High Purity Scrap storage silo with a cyclone, installed in 1962. Vented out stack S-29.

E-51 - Two weigh hoppers, rated capacity of 1500 lb/hr. Fugitive emission point.

#### **Additional Conditions**

- **1. Standards** (Regulation 2.16, section 4.1.1)
  - a. **Opacity** (Regulation 6.09, section 3.1)

The owner or operator shall not cause or permit the discharge of emissions equal to or in excess of 20% opacity.

- b. **PM** (Regulation 6.09, section 3.4)
  - i. The owner or operator shall limit PM emissions from Emission points E-46 and E-47 to 2.76 lb/hr each.
  - ii. The owner or operator shall limit PM emissions from Emission points E-49 and E-50 to 3.38 lb/hr each.
- **2. Monitoring** (Regulation 2.16, sections 4.1.9.1.2)

## a. **Opacity**

- i. To demonstrate compliance with the opacity standard, the owner or operator shall conduct a weekly one-minute visible emissions survey, during normal operation and daylight hours, of the PM Emission Points (stacks) identified in the U-12 components listing. No more than four Emission Points shall be observed simultaneously.
- ii. For Emission Points without observed visible emissions during twelve consecutive operating weeks, the owner or operator may elect to conduct a monthly one-minute visible emission survey, during normal operation and daylight hours. No more than four Emission Points shall be observed simultaneously.
- iii. At Emission Points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 for stack emissions or Method 22 for fugitive emissions within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance. Subsequent visible emission surveys shall be conducted as indicated in item 2.a.i.
- iv. If an Emission Point is not being operated during a given day (or week, as appropriate), then no visible emission survey needs to be performed and a negative declaration may be entered in the record.

### b. **PM**

- i. The owner or operator shall visually inspect the cyclones for deterioration monthly. Any noted material failures shall have repairs instituted within 7 days upon discovery.
- ii. The owner or operator shall perform stack tests for emission points E-46, E-47, E-49 and E-50 using Reference Method 1 through 5 for PM once during the third year of the permit period.

## **3. Record Keeping** (Regulation 2.16, section 4.1.9.2)

The owner or operator shall clearly identify all deviations from permit requirements in the semi-annual reports. All reports shall be certified by a responsible official as defined in Regulation 2.16, section 2.36. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for each of the following categories. The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for:

## a. **Opacity**

- i Emission Unit ID number and Stack ID number
- ii. The beginning and ending date of the reporting period
- iii. The date, time, and results of each visible emissions survey conducted
- iv. The date, time, and results of each Method 9 or Method 22 conducted (or a negative declaration if none)
- v. Description of any corrective action taken pursuant to Additional Condition 2.a.iii.

## b. **PM**

- i. Maintain records of monthly visual inspections of the control devices. These records shall include:
  - 1) Name of inspector
  - 2) Date of inspection
  - 3) Inspection results
  - 4) Any repairs instituted due to inspection results.
- ii. The owner or operator shall keep daily records of all production rates. They shall then calculate the amount of hourly PM emitted, based on the hours of actual operation of the processes during each day and the design collection efficiency of any filtration devices used, to control emissions below the standard.

## **4. Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the semi-annual reports. All reports shall be certified by a responsible official as defined in Regulation 2.16, section 2.36. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for each of the following categories. The owner or operator shall report semi-annually the following:

## a. **Opacity**

- i. Emission Unit ID number and Stack ID number
- ii. The beginning and ending date of the reporting period
- iii. The date, time, and results of each Method 9 or Method 22 conducted (or a negative declaration if none)
- iv. Description of any corrective action taken pursuant to Additional Condition 2.a.iii.

## b. **PM**

- i. Emission Unit ID number and Emission point ID number
- ii. The beginning and ending date of the reporting period
- iii. Identification of all periods of exceedances of the hourly PM emission standard for each emission point including the quantity of excess emissions
- iv. Description of any corrective action taken for each exceedance

Emission Unit U-13 Description: Aluminum Paste Process

# **Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 3, 4, 5
6.24	Standard of Performance for Existing Sources Using Organic Materials	1, 2, 3.3, 4, 5, 6, 7
7.25	Standards of Performance for New Sources Using Volatile Organic Compounds	1, 2, 3.2, 4, 5

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.11	Standards of Performance for Existing Sources Emitting Toxic Air Pollutants	1, 2, 3, 4, 5, 6
5.12	Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants	1, 2, 3, 4, 5
5.14	Hazardous Air Pollutants and Source Categories	1, 2, 3, 4

## **Allowable Emissions:**

Pollutant	Limit/Standard	
VOC	Limit VOC emissions to 40 lb/day and no more than 8 lb/hr for Class II solvents and limit VOC emissions to 3000 lb/day and no more than 450 lb/hr for Class III solvents (Regulation 6.24, sections 3.2 and 3.3)	
	15 tons/year (Regulation 7.25, section 3.2)	
TAPs	See Additional Condition 1.b	

## **Components:**

- **E-52** Ball Mill #1, size 4x22, installed in 1947. Vented out stack S-30.
- **E-53** Ball Mill #2,size 4x22, installed in 1947. Vented out stack S-31.
- **E-54** Ball Mill #3, size 4x22, installed in 1947. Vented out stack S-32.
- E-55 Ball Mill #4,size 4x22, installed in 1947. Vented out stack S-33.
- **E-56** Ball Mill #5, size 4x22, installed in 1947. Vented out stack S-34.
- **E-57** Ball Mill #6, size 4x22, installed in 1978. Vented out stack S-35.
- **E-58** Ball Mill #7, size 4x27, installed in 1978. Vented out stack S-36.
- E-59 Ball Mill #21, size 3x27, installed in 1969. Vented out stack S-37.
- **E-60** Ball Mill #22, size 3x27, installed in 1969. Vented out stack S-38.
- **E-61** Eight slurry tanks, rated capacity of 1000 gal each. Fugitive emission point.
- **E-62** Six slurry tanks, rated capacity of 1500 gal each. Fugitive emission point.
- E-63 Four slurry tanks, rated capacity of 2000 gal each. Fugitive emission point.
- **E-64** Six slurry tanks, rated capacity of 500 gal each. Fugitive emission point.
- **E-65** Two slurry tanks, rated capacity of 100 gal each. Fugitive emission point.
- **E-66** Eight screens, rated capacity of 30 gal/min. Fugitive emission point.
- **E-67** One Centrifuge, rated capacity of 25 gal/min, installed in 1960. Fugitive emission point.
- **E-68** Filter Press #1, rated capacity of 3000 lb, installed in 1987. Fugitive emission point.
- **E-69** Filter Press #2, rated capacity of 2500 lb, installed in 1947. Fugitive emission point.
- **E-70** Filter Press #3, rated capacity of 2500 lb, installed in 1947. Fugitive emission point.
- **E-71** Filter Press #4, rated capacity of 3000 lb, installed in 1979. Fugitive emission point.
- E-72 Filter Press #5, rated capacity of 2500 lb, installed in 1956. Fugitive emission point.
- E-73 Filter Press #6, rated capacity of 2500 lb, installed in 1970. Fugitive emission point.

- E-74 Filter Press #7, rated capacity of 3000 lb, installed in 1981. Fugitive emission point.
- E-75 Drum Filter Press, rated capacity of 400 lb, installed in 1947. Fugitive emission point.
- **E-76** Fine Accumulator #1, rated capacity of 20,000 lb, installed in 1973. Fugitive emission point.
- **E-77** Fine Accumulator #2, rated capacity of 12,500 lb, installed in 1981. Fugitive emission point.
- E-78 Finish Mixer, rated capacity of 10,000 lb, installed in 1966. Fugitive emission point.
- **E-79** Coarse Accumulator, rated capacity of 20,000 lb, installed in 1966. Fugitive emission point.

#### **Additional Conditions**

## **1. Standards** (Regulation 2.16, section 4.1.1)

### a. **VOC**

- i. The owner or operator shall use only Class II or Class III solvents. (Regulation 6.24, section 3.2 and 3.3)
- ii. The owner or operator shall limit the VOC emissions to 40 lb/day and no more than 8 lb/hr for Class II solvents and limit VOC emissions to 3000 lb/day and no more than 450 lb/hr for Class III solvents from all emission points listed as components except for those specifically listed in 1.a.iii.. (Regulation 6.24, section 3.3)
- iii. The owner or operator shall limit the VOC emissions from emission points E-68, E-71, E-74, and E-77 to 15 tons/year. (Regulation 7.25, section 3.2)

## b. **TAPs** (Regulation 5.11 & 5.12)

The owner or operator shall limit Toxic Air Pollutant (TAP) emissions from this facility to no more than the Adjusted Significance Level (ASL) specified in Regulations 5.11 and 5.12 for emission points E-52 through E-103 and E-105 through E-107, unless modeling or a BACT/RACT analysis has been performed and submitted to the District, to demonstrate compliance.

## **2. Monitoring** (Regulation 2.16, section 4.1.9.1.2)

- a. **VOC** (Regulation 1.05, Section 4)
  - i. The owner or operator shall use the following emission factors to demonstrate compliance with the hourly, daily or annual emission limits in additional conditions 1.a.i, 1.a.ii and 1.a.iii.

EQUIPMENT	EMISSION PT#	VOC EMISSION FACTOR	DETERMINATION METHOD
#1 Ball Mill	E-52	3.02 lb/hr	See emission testing done July 26, 1990 on #5 Mill.
#2 Ball Mill	E-53	3.02 lb/hr	See emission testing done July 26, 1990 on #5 Mill.

#3 Ball Mill	E-54	3.02 lb/hr	See emission testing done July 26, 1990 on #5 Mill.
#4 Ball Mill	E-55	3.02 lb/hr	See emission testing done July 26, 1990 on #5 Mill.
#5 Ball Mill	E-56	3.02 lb/hr	See emission testing done July 26, 1990 on #5 Mill.
#6 Ball Mill	E-57	1.1 lb/hr	See emission testing done July 26, 1990 on #5 Mill.
#7 Ball Mill	E-58	3.1 lb/hr	BACT test done on September 6, 1999
#21 Ball Mill	E-59	3.1 lb/hr	See emission testing done October 16 & 18, 1972, and on March 7, 1974 on #24 Mill.
#22 Ball Mill	E-60	3.1 lb/hr	See emission testing done October 16 & 18, 1972, and on March 7, 1974 on #24 Mill.
Slurry tanks 8 @ 1000 gal. 6 @ 1500 gal. 4 @ 2500 gal. 6 @ 500 gal. 2 @ 100 gal.	E-61 through E-65	0.176 lb/hr 0.395 lb/hr 0.395 lb/hr 0.1 lb/hr 0.1 lb 0.1 lb/hr	See following calculations for VOC emissions - Open top slurry tanks
Screens	E-66	0.0294 lb/hr	See following calculations for VOC emissions - Open top slurry tanks
Centrifuge	E-67	0.112 lb/hr	See following calculations for VOC emissions - Open top slurry tanks
Filter Press	E-68 through E-75	0.163 lb/hr	See following calculations for VOC emissions - Open top slurry tanks

Mixer (Fine Accumulator #1)	E-76	0.245 lb/hr	See following calculations for VOC emissions - Paste Mixers.
Mixer (Fine Accumulator #2)	E-77	0.245 lb/hr	See following calculations for VOC emissions - Paste Mixers.
Mixer (Finish Mixer)	E-78	0.245 lb/hr	See following calculations for VOC emissions - Paste Mixers.
Mixer (Course Accumulator)	E-79	0.314 lb/hr	See following calculations for VOC emissions - Paste Mixers.

## **Determination Methods:**

## Calculations for VOC emissions - Open top slurry tanks

Slurry Tanks -	Open Area	<u>X</u>	0.014 lb/hr/	<u>'ft.²</u>
8 ea. 1000 gal 6 ea. 1500 gal 4 ea. 2500 gal 6 ea. 500 gal 2 ea. 100 gal	4' Dia. = 6' Dia. = 6' Dia. = 3' Dia. = 3' Dia. =	12.56 Ft. <sup>2</sup> X 28.2 Ft. <sup>2</sup> X 28.2 Ft. <sup>2</sup> X 7.06 Ft. <sup>2</sup> X 7.06 Ft. <sup>2</sup> X	0.014 = 0.39 $0.014 = 0.39$ $0.014 = 0.1$	76 lb/hr 95 lb/hr 95 lb/hr 1b/hr
<u>Screens</u> -	Open Area	X	0.0144 lb/hr/Ft <sup>-2</sup>	
8 ea. 2.04'	X 1' = 2.04 F	$St^2 X 0.0144 =$	0.0294 lb/hr	

6 ea. Filter Presses - Open Area X 0.014 lb/hr/Ft.<sup>2</sup>

All troughs are 10" wide X = 14.0" long = 11.7Ft.<sup>2</sup> X = 0.014 = 0.163 lb/hr. ea.

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Holding Tank - Stills	Open Area		<u>X</u>	0.014	4 lb/hr/Ft <sup>2</sup>
3	'0" X 1'0"	X	0 014 lb/hr/Ft <sup>2</sup>	=	0.042 lb/hr

#### Calculations for VOC emissions - Paste Mixers

<u>Mixers</u>	Open Area			<u>X</u>	0.014 lb/h	r/Ft. <sup>2</sup> XSolvent
				Con	tent of Past	<u>ee 35%</u>
#1 and #2 Fines Ac	ecumulators - 5' X 1	0' X	0.014	X	35%	=0.245 lb/hr
Finishing	- 4' X 12'6"	X	0.014	X	35%	=0.245 lb/hr
Coarse Mixer	- 4' X 16'	X	0.014	X	35%	=0.314  lb/hr

### b. TAPs

The owner or operator shall calculate average hourly TAP emissions, based on records and information obtained in additional condition 2.a to demonstrate ongoing compliance with emission being maintained below the ASL.

## **3. Record Keeping** (Regulation 2.16, section 4.1.9.2)

## a. VOC

- i. The owner or operator shall keep daily records of hours of operation of each emission point within this emission unit.
- ii. The owner or operator shall keep daily records of the compliance demonstration denoted in additional condition 2.a.
- iii. The owner or operator shall, based on 3.a.i and 3.a.ii, calculate hourly emissions to demonstrate compliance with 1.a.ii.
- iv. The owner or operator shall keep monthly emission records for emission points E-68, E-71, E-74, and E-77. The monthly emission from these points shall be combined into a consecutive 12 month total to demonstrate compliance with 1.a.iii.

### b. TAPs

Based on 3.a, the owner or operator shall, on a monthly basis, calculate hourly TAP emissions to demonstrate compliance with 1.2.

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## **4. Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the semi-annual reports. All reports shall be certified by a responsible official as defined in Regulation 2.16, section 2.36. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for each of the following categories. The owner or operator shall report semi-annually the following:

### a. **VOC**

- i. For Emission points subject to Regulation 6.24:
  - 1) Emission Unit ID number and Emission point ID number
  - 2) The beginning and ending date of the reporting period
  - Identification of all periods of exceedances of the hourly and daily VOC emission standard for each emission point including the quantity of excess emissions
  - 4) Description of any corrective action taken for each exceedance
- ii. For Emission points subject to Regulation 7.25:
  - 1) Emission Unit ID number and Emission point ID number
  - 2) The beginning and ending date of the reporting period
  - 3) The 12 consecutive month VOC emissions for each month of the reporting period

### b. TAPs

Any occurrence where the calculated ASL was exceeded.

### **Comments**

- 1. Regulation 6.24 applies to emission points E-52 through E-67, E-69, E-70, E-72, E-73, E-75, E-76, E-78, and E-79.
- 2. Regulation 7.25 applies to emission points E-68, E-71, E-74, and E-77.

3. Regulation 5.11 applies to emission points E-52 through E-67 and E-69 through E-79.

4. Regulation 5.12 applies to emission point E-68.

Emission Unit U-14 Description: Aluminum Paste Dryers

# **Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS			
Regulation Title Applicable Sections			
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 3, 4, 5	
6.24	Standard of Performance for Existing Sources Using Organic Materials	1, 2, 3.3, 4, 5, 6, 7	

DISTRICT ONLY ENFORCEABLE REGULATIONS			
Regulation Title Applicable Sections			
5.11	Standards of Performance for Existing Sources Emitting Toxic Air Pollutants	1, 2, 3, 4, 5, 6	
5.14	Hazardous Air Pollutants and Source Categories	1, 2, 3, 4	

# **Allowable Emissions:**

Pollutant	Limit/Standard
TAPs	See Additional Condition 1.b
VOC	Limit the VOC emissions to 40 lb/day and no more than 8 lb/hr for Class II solvents and limit VOC emissions to 3000 lb/day and no more than 450 lb/hr for Class III solvents. (Regulation 6.24, sections 3.2 and 3.3)

## **Components:**

- **E-80** Vacuum Dryer #1, rated capacity of 1500 lb, installed in 1970, with control device C-2 (E-81). Fugitive emission point.
- **E-81** Condenser/Vacuum Pump #1 ( C-2 ), rated capacity of 100 CFM, installed in 1978. Vented out stack S-39.
- **E-82** Vacuum Dryer #2, rated capacity of 1500 lb, installed in 1978, with control device C-3 (E-83). Fugitive emission point.
- E-83 Condenser/Vacuum Pump #2 ( C-3 ), rated capacity of 100 CFM, installed in 1978. Vented out stack S-40.
- **E-84** Vacuum Dryer #3, rated capacity of 1500 lb, installed in 1978, with control device C-4 (E-85). Fugitive emission point.
- **E-85** Condenser/Vacuum Pump #3 ( C-4 ), rated capacity of 100 CFM, installed in 1978. Vented out stack S-41.

#### **Additional Conditions**

## 1. Standards (Regulation 2.16, section 4.1.1)

### a. **VOC**

- i. The owner or operator shall only use Class II and Class III solvents. (Regulation 6.24, sections 3.2)
- ii. The owner or operator shall limit the VOC emissions to 40 lb/day and no more than 8 lb/hr for Class II solvents and limit VOC emissions to 3000 lb/day and no more than 450 lb/hr for Class III solvents. (Regulation 6.24, sections 3.3)

## b. **TAPs** (Regulation 5.11)

Limit Toxic Air Pollutant (TAP) emissions from this source to no more than the Adjusted Significance Level (ASL) specified in Regulations 5.11 and 5.12 for emission points E-52 through E-103 and E-105 through E-107, unless modeling or a BACT/RACT analysis has been performed to demonstrate compliance.

## **2. Monitoring** (Regulation 2.16, section 4.1.9.1.2)

- a. **VOC** (Regulation 1.05, Section 4)
  - i. The owner or operator shall use the following emission factors to demonstrate compliance with the hourly, daily or annual emission limits in additional conditions 1.a.i and 1.a.ii.

EQUIPMENT	EMISSION PT#	VOC EMISSION FACTOR	HOW DETERMINED
Vacuum Dryers (1,2,3)	E-80, E-82, E-84	0.0 lb/hr	All VOC emissions are discharged out the vacuum pump. See E81, 83, 85
Vacuum Dryers (1,2,3) Condenser/Vacuum Pump (1,2,3)	E-81, E-83, E-85	1.6 lb/hr	BACT analysis done on November 30, 1990.

ii. The owner or operator shall perform a stack test, using EPA Reference Method 25, for VOC emissions. The testing shall be for each ball mill, and shall be performed during the third year of the permit period. Condenser C-1 shall also be tested concurrently to demonstrate continued 75% VOC removal efficiency.

iii. The owner or operator shall monitor water flow for condenser C-1. Record water flow rate from water flow meter once per shift, when Ball Mill #7 is being operated. The record shall contain: time, date, individual performing the recording and water flow rate.

#### b. TAPs

The owner or operator shall calculate average hourly TAP emissions, based on records and information obtained in additional condition 2.a to demonstrate ongoing compliance with emission being maintained below the ASL.

## **3. Record Keeping** (Regulation 2.16, section 4.1.9.2)

#### a. **VOC**

- i. The owner or operator shall keep daily records of hours of operation of each emission point within this emission unit.
- ii. The owner or operator shall keep daily records of the compliance demonstration denoted in additional condition 2.a.
- iii. The owner or operator shall, based on 3.a.i and 3.a.ii, calculate hourly emissions to demonstrate compliance with 1.a.ii.
- iv. The owner or operator shall keep monthly emission records for emission points E-68, E-71, E-74, and E-77. The monthly emission from these points shall be combined into a consecutive 12 month total to demonstrate compliance with 1.a.iii.

### b. TAPs

Based on 3.a, the owner or operator shall, on a monthly basis, calculate hourly TAP emissions to demonstrate compliance with 1.2.

## **4. Reporting** (Regulation 2.16, section 4.1.9.3)

Clearly identify all deviations from permit requirements in the semi-annual reports. All reports shall be certified by a responsible official as defined in Regulation 2.16, section 2.36. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for each of the following categories. The owner or operator shall report semi-annually the following:

#### a. **VOC**

i. For control device C-2 through C-4:

- 1) Emission Unit ID number and Control ID number
- 2) The beginning and ending date of the reporting period
- 3) Identification of the operating parameter being monitored
- 4) Number, duration and cause of all excursions. Excursion is defined as any departure from the performance indicator range
- 5) Description of the corrective action taken for each excursion
- ii. For Emission points subject to Regulation 6.24:
  - 1) Emission Unit ID number and Emission point ID number
  - 2) The beginning and ending date of the reporting period
  - 3) Identification of all periods of exceedances of the hourly and daily VOC emission standard for each emission point including the quantity of excess emissions
  - 4) Description of any corrective action taken for each exceedance

## b. TAPs

The owner or operator shall report any occurrence where the calculated ASL was exceeded.

## **Emission Unit U-15 Description:** Mixers

## **Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS			
Regulation Title Applicable Sections			
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 3, 4, 5	
6.24	Standard of Performance for Existing Sources Using Organic Materials	1, 2, 3.2, 3.3, 4, 5, 6, 7	

DISTRICT ONLY ENFORCEABLE REGULATIONS			
Regulation	Title	Applicable Sections	
5.11	Standards of Performance for Existing Sources Emitting Toxic Air Pollutants	1, 2, 3, 4, 5, 6	
5.14	Hazardous Air Pollutants and Source Categories	1, 2, 3, 4	

## **Allowable Emissions:**

Pollutant	Limit/Standard
TAPs	See Additional Condition 1.b
VOC	Limit the VOC emissions to 40 lb/day and no more than 8 lb/hr for Class II solvents and limit VOC emissions to 3000 lb/day and no more than 450 lb/hr for Class III solvents. (Regulation 6.24, sections 3.2 and 3.3)

# **Components:**

- E-86 Mixer #6, rated capacity of 2000 lb, installed in 1976. Fugitive emission point.
- E-87 Mixer #7, rated capacity of 3000 lb, installed in 1967. Fugitive emission point.
- E-88 Mixer #8, rated capacity of 1000 lb, installed in 1950. Fugitive emission point.

### **Additional Conditions**

## **1. Standards** (Regulation 2.16, section 4.1.1)

### a. **VOC**

- i. The owner or operator shall use only Class II and Class III solvents. (Regulation 6.24, sections 3.2 and 3.3)
- ii. The owner or operator shall limit the VOC emissions to 40 lb/day and no more than 8 lb/hr for Class II solvents and limit VOC emissions to 3000 lb/day and no more than 450 lb/hr for Class III solvents. (Regulation 6.24, sections 3.2 and 3.3)

## b. **TAPs** (Regulation 5.11)

Limit Toxic Air Pollutant (TAP) emissions from this source to no more than the Adjusted Significance Level (ASL) specified in Regulation 5.11 and 5.12 for emission points E-52 through E-103 and E-105 through E-107, unless modeling or a BACT/RACT analysis has been performed to demonstrate compliance.

## **2. Monitoring** (Regulation 2.16, section 4.1.2.1.9)

a. **VOC** (Regulation 1.05, Section 4)

The owner or operator shall, by using the following emission factors, demonstrate compliance with the hourly, daily or annual emission limits in additional conditions 1.a.i, and 1.a.ii.

EQUIPMENT	EMISSION PT#	VOC EMISSION FACTOR	HOW DETERMINED
Mixer (#6)	E-86	0.098 lb/hr	See following calculations for VOC emissions - Paste Mixers.
Mixer (#7)	E-87	0.098 lb/hr	See following calculations for VOC emissions - Paste Mixers.
Mixer (#8)	E-88	0.098 lb/hr	See following calculations for VOC emissions - Paste Mixers.

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Mixers Open Area  $X = 0.014 \text{ lb/hr/Ft.}^2 \times Solvent Content of Paste}$ #6,7,8 Mixers  $-4' \times 5' \times 0.014 \times 35\% = 0.098 \text{ lb/hr ea.}$ 

### b. **TAPs** (Regulation 5.11)

The owner or operator shall calculate average hourly TAP emissions, based on records and information contained in additional condition 3 and 4(b),(c), to assure that the ASL has not been exceeded.

## **3. Record Keeping** (Regulation 2.16, section 4.1.9.2)

### a. **VOC**

- i. The owner or operator shall keep daily records of hours of operation and which class of solvent is being used for each emission point within this emission unit.
- ii. The owner or operator shall keep daily records of the compliance demonstration denoted in additional condition #2.

### b. TAPs

Based on 3.a, the owner or operator shall, on a monthly basis, calculate hourly TAP emissions to demonstrate compliance with 1.2.

## **4. Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the semi-annual reports. All reports shall be certified by a responsible official as defined in Regulation 2.16, section 2.36. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for each of the following categories.

### a. **VOC**

The owner or operator shall report semi-annually the following:

- i. Emission Unit ID number and Emission point ID number
- ii. The beginning and ending date of the reporting period
- iii. Identification of all periods of exceedances of the hourly and daily VOC emission standard for each emission point including the quantity of excess emissions
- iv. Identification of material classification
- v. Description of any corrective action taken for each exceedance

## b. TAPs

The owner or operator shall report any occurrence where the calculated ASL was exceeded.

Emissions Unit U-16 Description: AST ( Aboveground Storage Tank ) Farm

**Applicable Regulations:** 

FEDERALLY ENFORCEABLE REGULATIONS			
Regulation	Title	Applicable Sections	
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 3, 4, 5	
40 CFR 60 Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	60.110b, 60.111b, 60.116b (a) (b), 60.117b	
7.12	Standards of Performance for New Storage Vessels for Volatile Organic Compounds	1, 2, 3.3, 4.1, 4.2, 7, 8	

DISTRICT ONLY ENFORCEABLE REGULATIONS			
Regulation	Title	Applicable Sections	
5.12	Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants	1, 2, 3, 4, 5	
5.14	Hazardous Air Pollutants and Source Categories	1, 2, 3, 4	
7.02	Federal New Source Performance Standards Incorporated by Reference	1.23, 2, 3, 4, 5	

# **Allowable Emissions:**

Pollutant	Limit/Standard
TAPs	See Additional Condition 1.b
VOC	For emission points E-89 through E-94 (40 CFR 60 Subpart Kb, section 60.116b (a) (b)), see additional condition 3.a.
	Maintain all storage tanks with submerged fill pipes (Regulation 7.12, section 3.3)

# **Components:**

E-89 - AST #1, containing mineral spirits, capacity of 15,500 gal. Vented out stack S-42.

- E-90 AST #2, containing mineral spirits, capacity of 15,500 gal. Vented out stack S-42.
- E-91 AST #3, containing stearic acid, capacity of 15,500 gal. Vented out stack S-42.
- E-92 AST #4, containing stearic acid, capacity of 15,500 gal. Vented out stack S-42.
- E-93 AST #5, containing oleic acid, capacity of 15,500 gal. Vented out stack S-42.
- E-94 AST #6, containing stearic/oleic acid, capacity of 15,500 gal. Vented out stack S-42.
- E-107 AST #7, containing high flash naptha, capacity of 6000 gal. Vented out stack S-42.

### **Additional Conditions**

### **1. Standards** (Regulation 2.16. Section 4.1.1)

a. **VOC** (Regulation 7.12, section 3.3)

The owner or operator shall maintain all storage tanks with submerged fill pipes.

b. **VOC** (40 CFR 60 Subpart Kb, section 60.116b (a) (b))

See additional condition 3.a.

### c. TAPs

Limit Toxic Air Pollutant (TAP) emissions from this source to no more than the Adjusted Significance Level (ASL) specified in Regulation 5.12 for emission points E-52 through E-103 and E-105 through E-107, unless modeling or a BACT/RACT analysis has been performed to demonstrate compliance.

## **2. Monitoring** (Regulation 2.16, section 4.1.9.1.2)

#### a. **VOC**

- i. The owner or operator shall keep monthly records of which class of solvent is being stored in each emission point within this emission unit.
- ii. The owner or operator shall maintain fill and throughput records for this emission unit
- iii. The owner or operator shall, by using the following emission factor, calculate daily emissions. (Regulation 1.05, Section 4)

EQUIPMENT	EMISSION PT#	VOC EMISSION FACTOR	HOW DETERMINED
AST #1 - #7	E-89, E-94, E-107	0.021 lb/hr	Tank program (AP42)

### b. TAPs

The owner or operator shall calculate average hourly TAP emissions, based on fill and through put records, to assure that the ASL has not been exceeded.

## **3. Record Keeping** (Regulation 2.16, section 4.1.9.2)

- a. **VOC** (40 CFR 60 Subpart Kb, section 60.116b (a) (b))
  - i. The owner or operator shall keep records of the dimensions and capacities of the storage tanks for emission points E-89 through E-94.
  - ii. See additional condition 2.a.ii.

### b. TAPs

Based on 2.b, the owner or operator shall, on a monthly basis, calculate hourly TAP emissions to demonstrate compliance with 1.b.

# **4. Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the semi-annual reports. All reports shall be certified by a responsible official as defined in Regulation 2.16, section 2.36. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for each of the following categories.

#### a. **VOC**

The owner or operator shall report semi-annually the following, for each emission point:

- i. Emission Unit ID number and Emission point ID number
- ii. The beginning and ending date of the reporting period
- iii. Identification of applicable equipment standard or record
- iv. A declaration that the equipment standard or record is being maintained

### b. TAPs

The owner or operator shall report any occurrence where the calculated ASL was exceeded.

# **Applicable Regulations:**

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FEDERALLY ENFORCEABLE REGULATIONS			
Regulation	Regulation Title Applicable Sections		
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 3, 4, 5	
6.24	Standard of Performance for Existing Sources Using Organic Materials	1, 2, 3, 4, 5, 6, 7	

DISTRICT ONLY ENFORCEABLE REGULATIONS			
Regulation	Title Applicable Sections		
5.11	Standards of Performance for Existing Sources Emitting Toxic Air Pollutants	1, 2, 3, 4, 5, 6	
5.14	Hazardous Air Pollutants and Source Categories	1, 2, 3, 4	

# **Allowable Emissions:**

Pollutant	Limit/Standard
TAPs	See Additional Condition 1.b
VOC	Limit the VOC emissions to 40 lb/day and no more than 8 lb/hr for Class II solvents and limit VOC emissions to 3000 lb/day and no more than 450 lb/hr for Class III solvents. (Regulation 6.24, sections 3.2 and 3.3)

# **Components:**

E-95 - Still #1, rated capacity of 350 gal/hr, installed in 1970. Fugitive emission point.

- E-96 Still #2, rated capacity of 350 gal/hr, installed in 1970. Fugitive emission point.
- E-97 Still #3, rated capacity of 350 gal/hr, installed in 1957. Fugitive emission point.
- E-98 Holding tank, capacity of 200 gal, installed in 1970. Fugitive emission point.
- E-99 Vacuum Pump, rated capacity of 350 gal/hr, installed in 1970. Vented out stack S-48.
- E-100 Sludge Accumulator tank, capacity of 1000 gal, installed in 1981. Vented out stack S-49.

### **Additional Conditions**

### **1. Standards** (Regulation 2.16, section 4.1.1)

### a. **VOC**

- i. The owner or operator shall use Class II and Class III solvents, only. (Regulation 6.24, sections 3.2 and 3.3)
- ii. The owner or operator shall limit the VOC emissions to 40 lb/day and no more than 8 lb/hr for Class II solvents and limit VOC emissions to 3000 lb/day and no more than 450 lb/hr for Class III solvents. (Regulation 6.24, sections 3.2 and 3.3)

## b. **TAPs** (Regulation 5.11)

Limit Toxic Air Pollutant (TAP) emissions from this source to no more than the Adjusted Significance Level (ASL) specified in Regulations 5.11 and 5.12 for emission points E-52 through E-103 and E-105 through E-107, unless modeling or a BACT/RACT analysis has been performed to demonstrate compliance.

## **2. Monitoring** (Regulation 2.16, section 4.1.2.1.9)

a. **VOC** (Regulation 1.05, Section 4)

The owner or operator shall, by using the following emission factors, demonstrate compliance with the hourly, daily or annual emission limits in additional conditions 1.a.i, and 1.a.ii.

EQUIPMENT	EMISSION PT#	VOC EMISSION FACTOR	HOW DETERMINED
Stills (1,2,3)	E-95 through E-97	None	All VOC emissions are discharged out the vacuum pump
Holding Tank	E-98	0.042 lb/hr	See following calculations for VOC emissions - holding tanks/stills
Vacuum Pump - Stills	E-99	3.21 lb/hr	See following calculations for VOC emissions - holding tanks/stills

Sludge	E-100	None	Sludge contains no
Accumulator			VOC 90% stearic acid
			and 10% aluminum
			pigment

 $\frac{\text{Holding Tank - Stills}}{3'0" \text{ X 1'0"}} \frac{\text{Open Area}}{\text{X}} \frac{\text{Q.014 lb/hr/Ft}^2}{\text{0.014 lb/hr/Ft}^2} = 0.042 \text{ lb/hr}$ 

### b. **TAPs** (Regulation 5.11)

The owner or operator shall calculate average hourly TAP emissions, based on records and information contained in additional condition 3 and 4(b),(c), to assure that the ASL has not been exceeded.

# **3. Record Keeping** (Regulation 2.16, section 4.1.9.2)

### a. **VOC**

- i. The owner or operator shall keep daily records of hours of operation and which class of solvent is being used for each emission point within this emission unit.
- ii. The owner or operator shall keep daily records of the compliance demonstration denoted in additional condition #2.

### b. TAPs

Based on 3.a, the owner or operator shall, on a monthly basis, calculate hourly TAP emissions to demonstrate compliance with 1.2.

### **4. Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the semi-annual reports. All reports shall be certified by a responsible official as defined in Regulation 2.16, section 2.36. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for each of the following categories.

### a. **VOC**

The owner or operator shall report semi-annually the following:

- i. Emission Unit ID number and Emission point ID number
- ii. The beginning and ending date of the reporting period
- iii. Identification of all periods of exceedances of the hourly and daily VOC emission standard for each emission point including the quantity of excess emissions
- iv. Identification of material classification
- v. Description of any corrective action taken for each exceedance

### b. TAPs

The owner or operator shall report any occurrence where the calculated ASL was exceeded.

Emission Unit U-18 Description: Non-halogenated Cold Solvent Metal Cleaners

**Applicable Regulations:** 

FEDERALLY ENFORCEABLE REGULATIONS			
Regulation	ation Title Applicable Sections		
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 3, 4, 5	
6.18	Standards of Performance for Existing Solvent Metal Cleaning Equipment	1, 2, 3, 4.1, 4.2	

DISTRICT ONLY ENFORCEABLE REGULATIONS			
Regulation	ation Title Applicable Sections		
5.14	Hazardous Air Pollutants and Source Categories	1, 2, 3, 4	
5.11	Standards of Performance for Existing Sources Emitting Toxic Air Pollutants	1, 2, 3, 4, 5, 6	

## **Allowable Emissions:**

Pollutant	Limit/Standard
TAPs	See Additional Condition # 3
VOC	See Additional Condition #1

## **Components:**

- **E-101** Non-halogenated cold solvent metal cleaning tank #1, rated capacity of 20 gal, installed in 1965. Fugitive emission point.
- **E-102** Non-halogenated cold solvent metal cleaning tank #2, rated capacity of 20 gal, installed in 1965. Fugitive emission point.
- **E-103** Non-halogenated cold solvent metal cleaning tank #3, rated capacity of 20 gal, installed in 1965. Fugitive emission point.

### **Additional Conditions**

**1. Standards** Regulation 2.16, section 4.1.1)

### a. **VOC**

- i. The cleaner shall be equipped with a cover. If the VOC volatility is greater than 15 mm Hg measured at 100°F or if the VOC is agitated or heated, then the cover shall be designed so that it can be easily operated with one hand.
- ii. The cleaner shall be equipped with a drainage facility such that VOC that drains off parts removed from the cleaner will return to the cleaner. If the VOC volatility is greater than 32 mm Hg measured at 100°F, then the drainage facility shall be internal so that parts are enclosed under the cover while draining. The drainage facility may be external if the District determines that an internal type cannot fit into the cleaning system.
- iii. A permanent, conspicuous label summarizing the operating requirements specified in 1.a.vi, vii, and viii shall be installed on or near the cleaner.
- iv. If used, the VOC spray shall be a fluid stream (not a fine, atomized, or shower type spray) at a pressure that does not cause excessive splashing.
- v. If the VOC volatility is greater than 32 mm Hg measured at 100°F or if the VOC is heated above 120°F, then one of the following control devices shall be used:
  - 1) Freeboard that gives a freeboard ratio equal to or greater than 0.7,
  - 2) Water cover (VOC must be insoluble in and heavier than water), or
  - 3) Other systems of equivalent control, such as a refrigerated chiller or carbon absorption.
- vi. Do not dispose of waste VOC or transfer it to another party in a manner that more than 20% by weight of the waste VOC can evaporate into the atmosphere. Store waste VOC only in covered containers,
- vii. Close degreaser cover whenever not handling a part in the cleaner, and
- viii. Drain cleaned parts until dripping ceases (15 seconds is usually necessary).
- ix Operate a cold cleaning degreaser with a solvent vapor pressure that exceeds 1.0 mm Hg (0.019 psi) measured at 20°C (68°F).

#### b. TAPs

Limit Toxic Air Pollutant (TAP) emissions from this source to no more than the Adjusted Significance Level (ASL) specified in Regulations 5.11 and 5.12 for

emission points E52-E103 and E105-E107, unless modeling or a BACT/RACT analysis has been performed to demonstrate compliance.

## **2. Monitoring**, Regulation 2.16, section 4.1.9.1.2)

### a. **VOC**

See additional condition 3.a

#### b. TAPs

The owner or operator shall calculate average hourly TAP emissions, based on records maintained for additional condition 3.a, to assure that the ASL has not been exceeded.

## **3. Record Keeping** (Regulation 2.16, section 4.1.9.2)

### a. **VOC**

- i. The owner or operator shall keep monthly records of VOC usage for each emission point.
- ii. The owner or operator shall:
  - 1) The name and address of the solvent supplier,
  - 2) The date of the purchase,
  - 3) The type of the solvent, and
  - 4) The vapor pressure of the solvent measured in mm Hg at 20°C (68°F).
- iii. The owner or operator shall maintain records of employee training for the proper operation of this emission unit. These records shall contain:
  - 1) The date of the training
  - 2) The name of the person trained
  - 3) Who performed the training

### b. TAPs

Based on 3.a, the owner or operator shall, on a monthly basis, calculate hourly TAP emissions to demonstrate compliance with additional condition 1.b.

# **4. Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the semi-annual reports. All reports shall be certified by a responsible official as defined in Regulation 2.16, section 2.36. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for each of the following categories.

### a. **VOC**

The owner or operator shall report semi-annually the following for each emission point:

- i. Emission Unit ID number and Emission point ID number
- ii. The beginning and ending date of the reporting period
- iv. Identification of applicable equipment standard or record
- v. A declaration that the equipment standard or record is being maintained

### b. TAPs

The owner or operator shall report any occurrence where the calculated ASL was exceeded.

Emission Unit U-20 Description: Drum Washer

# **Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS			
Regulation	Title Applicable Sections		
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 3, 4, 5	
6.24	Standard of Performance for Existing Sources Using Organic Materials	1, 2, 3, 4, 5, 6, 7	

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Regulation Title Applicable Sections	
5.14	Hazardous Air Pollutants and Source Categories	1, 2, 3, 4
5.11	Standards of Performance for Existing Sources Emitting Toxic Air Pollutants	1, 2, 3, 4, 5, 6

# **Allowable Emissions:**

Pollutant	Limit/Standard
TAPs	See Additional Condition # 5
VOC	3000 lb/day and 450 lb/hr of Class III solvents (Regulation 6.24, section 3.3)

# **Components:**

E-105 - Drum Wash Tank, rated capacity of 300 gal, installed in 1973. Fugitive emission point.

**E-106** - Drum Rinse Tank, rated capacity of 150 gal, installed in 1973. Fugitive emission point.

### **Additional Conditions**

### **1. Standards** (Regulation 2.16, section 4.1.1)

### a. **VOC**

- i. The owner or operator shall use Class II and Class III solvents, only. (Regulation 6.24, sections 3.2 and 3.3)
- ii. The owner or operator shall limit the VOC emissions to 40 lb/day and no more than 8 lb/hr for Class II solvents and limit VOC emissions to 3000 lb/day and no more than 450 lb/hr for Class III solvents.

  (Regulation 6.24, sections 3.2 and 3.3)

### b. **TAPs** (Regulation 5.11)

Limit Toxic Air Pollutant (TAP) emissions from this source to no more than the Adjusted Significance Level (ASL) specified in Regulations 5.11 and 5.12 for emission points E52-E103 and E105-E107, unless modeling or a BACT/RACT analysis has been performed to demonstrate compliance.

# **2. Monitoring** (Regulation 2.16, section 4.1.9.1.2)

a. **VOC** (Regulation 1.05, Section 4)

The owner or operator shall, by using the following emission factors, demonstrate compliance with the hourly, daily or annual emission limits in additional conditions 1.a.i and 1.a.ii.

EQUIPMENT	EMISSION PT#	VOC EMISSION FACTOR	HOW DETERMINED
Drum Washer Tanks	E-105 and E-106	0.109 lb/hr	calculated based on consumption

### b. TAPs (Regulation 5.11)

The owner or operator shall calculate average hourly TAP emissions, based on records and information contained in additional condition 2.a to assure that the ASL has not been exceeded.

# **3. Record Keeping** (Regulation 2.16, section 4.1.9.2)

### a. **VOC**

- i. The owner or operator shall keep daily records of hours of operation, which class of solvent is being used and quantity added for each emission point within this emission unit.
- ii. The owner or operator shall keep daily records of the compliance demonstration denoted in additional condition 2.a.

### b. TAPs

Based on 3.a, the owner or operator shall, on a monthly basis, calculate hourly TAP emissions to demonstrate compliance with 1.b.

# **4. Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the semi-annual reports. All reports shall be certified by a responsible official as defined in Regulation 2.16, section 2.36. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for each of the following categories.

#### a. **VOC**

- i. Emission Unit ID number and Emission point ID number
- ii. The beginning and ending date of the reporting period
- iii. Identification of all periods of exceedances of the hourly and daily VOC emission standard for each emission point including the quantity of excess emissions
- iv. Identification of material classification
- v. Description of any corrective action taken for each exceedance

### b. TAPs

The owner or operator shall report any occurrence where the calculated ASL was exceeded.

### PERMIT SHIELD

The owner or operator is hereby granted a permit shield that shall apply as long as the owner or operator demonstrates ongoing compliance with all the conditions of this permit. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements of the regulations cited in this permit as of the date of issuance per Regulation 2.16, section 4.6.1.1.

### **OFF-PERMIT DOCUMENTS**

There are no Off-Permit Documents associated with the issuance of this permit.

## ALTERNATIVE OPERATING SCENARIO

The company requested no alternative operating scenario in its Title V application.

INSIGNIFICANT ACTIVITIES			
Description	Quantity	Basis	
AST #8 #2 Fuel Oil storage tank (E108) ( 1000 gal )	1	Reg 2.02, sec 2.3.9.2	
Natural Gas, 2 MMBtu Hot Air Heater	1	Reg. 2.02, sec 2.1.1	
Research and Development Activities	2	Reg 2.02, sec 2.3.27	
Brazing, soldering or welding equipment	Various	Reg 2.02, sec 2.3.4	
Lab ventilating and exhaust systems	Various	Reg 2.02, sec 2.3.11	

- A. Insignificant Activities are only those activities or processes falling into the general categories defined in Regulation 2.02, Section 2, and not associated with a specific operation or process for which there is a specific regulation. Equipment associated with a specific operation or process (Emission Unit) shall be listed with the specific process even though there may be no applicable requirements. Information contained in the permit and permit summary shall clearly indicate that those items identified with negligible emissions have no applicable requirements.
- B. Activities identified In Regulation 2.02, Section 2, may not require a permit and may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply to the source and must be included in the Title V permit.

- i. No facility, having been designated as an insignificant activity, shall be exempt from any generally applicable requirements which shall include a 20% opacity limit for facilities not otherwise regulated.
- ii. No periodic monitoring shall be required for facilities designated as insignificant activities.